

Digital champions
FStech Omnichannel Banking
Conference reviewed

Datacentres supplement
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The social arena
The benefits and challenges around
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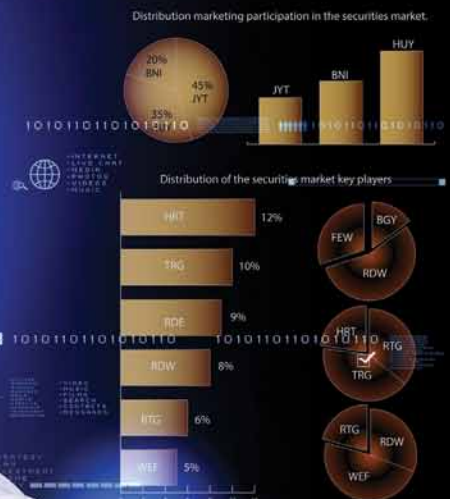


September 2014

FS**tech**

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Core challenges



**FIs face up to huge changes to their core banking systems,
as new entrants and digital startups nip at their heels**

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To reboot or not to reboot?

Will new tech and shifts in consumer mindsets shake up banking or will it continue to be immune to change?

I recently finished reading Brett King's *Breaking Banks: The Innovators, Rogues and Strategists Rebooting Banking* (see p. 51 for my review). In his follow up to *BANK 2.0*, King says, "it is true that there is no Amazon or Facebook of banking right now that has taken the banking world by storm and is taking hundreds of thousands of people out of the traditional banking system." That (and a comment made during a recent FStech webinar, further info on which on p. 25) got me thinking. Whilst discussing challenger banks and tech savvy start ups, one of the panellists remarked that we are

seeing massive economic and cultural transformation driven by digital. This has impacted upon retail. E-tailers came along and shook up their bricks and mortar counterparts. Could Europe's traditional banking system similarly be undermined? It depends on whom you listen to. On the one hand, Zahir Bokhari, lead banking partner at Deloitte, argues: "Banks' core competitive advantages over new entrants are being eroded by technology and regulation. Emerging business models are using new technology to reinvent key elements of financial services, and new players are undermining the traditional bank business model by cherry-picking more attractive parts of the business. Banks' access to cheap funding via current accounts is under threat and will force them to redesign their business strategies. They will have to slash costs, accept that they can no longer subsidise loss-leading products and will not be able to operate such large branch networks. As

competition from alternative sources of funding intensifies, banks will need to reinvent their technology infrastructure. It is not credible to anticipate healthy returns while operating inflexible IT systems based on 1970s technology."

On the other, Duncan O'Leary, research director at Demos, recently noted that, since seven-day switching has been

introduced, the number of people changing their current accounts remains pretty minimal. Is there an appetite among customers for an Amazon, Facebook or Apple to take the banking world by storm? I'm not so sure. There is activity that suggests a certain amount of disruption. Over 1.75 billion mobile phone users will have used their devices for banking purposes by the

end of 2019, compared to 800 million this year, according to Juniper Research. But beyond that, I'm reminded of when contactless cards were introduced a few years back. There were all sorts of grandiose claims being bandied around, chief among them being that a cashless society was nigh. And yet coins and notes still sit atop the payments pile.

"In all, banking hasn't really changed materially in hundreds of years. Ostensibly, the nineteenth century form of the bank branch is still largely recognisable today," Hart writes. Barclays introduced the first UK ATM in 1967 and it could be argued there hasn't been another major innovation in banking since. Maybe those all important young people don't particularly care. After all, young and old, we all just want our banks to handle our money and provide a decent service; do we really want them to be tech rockstars to boot? Let's not forget the value of listening to customers over making assumptions.



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at a glance

[Rounding up the essential FS technology news from the last two months]

The number of current account moves in the UK rose by 16 per cent to reach 592,695 in the first six months of this year. Stats from the Payments Council also revealed that 67 per cent of people were now aware of the Current Account Switch Service, up from 64 per cent at the beginning of the year. The Payments Council said that customer confidence in the new service was similarly high, increasing slightly from 63 per cent to 65 per cent over the same time period. Launched in September 2013, the service allows customers to change their current account to another bank or building society within a shorter timeframe of seven working days. So far, approximately 910,000 switches have been successfully completed. Adrian Kamellard, chief executive of the Payments Council, said: "The Current Account Switch Service set out to remove the fear-factor from

switching and these results suggest that it is doing exactly that. Awareness and confidence levels are up as individuals, small businesses and charities are getting the message that switching has become easy and straightforward. Competition is growing as existing providers are upping their offerings and challenger banks are competing to attract new customers. This all amounts to greater choice and good news for customers."

TSB has rolled out 2.2 million new contactless debit cards following its announcement in January that it would issue them to all eligible customers; it saw contactless spend increase in June to nearly six times the amount spent in January and taps by TSB customers have increased fourfold. According to the bank's data, the average payment has been consistently between £6 and £7 over the past six months, with many using their cards for smaller purchases at Marks & Spencer, McDonalds, Boots and on Transport for London buses. Jatin Patel, products director, TSB, says: "We are extremely proud that in just six months all of our eligible debit card customers have been issued with new TSB cards with contactless functionality. Life is increasingly busy so offering our customers the opportunity to 'tap and go' was an important step to ensure they can benefit from the latest and most convenient payment options."

Twenty five per cent of UK consumers would consider using a

digital, branchless bank, according to an Accenture survey. Those aged 25 to 34 are most keen on the idea; 33 per cent would consider using one, while the youngest group of bank customers – those aged 18 to 24 – are the least receptive (22 per cent expressed an interest). Based on interviews with more than 3,600 UK current account holders, the survey shows that 80 per cent went online at least once a month to interact with their banks, while monthly mobile banking usage has risen to 27 per cent of customers compared with 21 per cent in 2012 and 10 per cent in 2011. At the same time, however, the number going into a branch at least once a month has risen from 45 per cent in 2012 to 52 per cent this year, with the most pronounced increase among those aged 18 to 24. Fifty four per cent of the youngest group say they visit their bank branch each month compared to 39 per cent of the same group in 2012.

"This year's survey underscores the growing complexity in how consumers want to interact with banks in the digital age," said Peter Kirk, a managing director in Accenture's FS group. "The youngest, most tech-savvy customers still value face-to-face contact as they begin their life's financial journey, whereas older customers who are further along in their work life are more open to a digital-only relationship. There is also evidence that some customers are not satisfied by their banks' current digital offerings. This presents difficult questions for banks as they look to balance digital channels with costly branch



Milestone for contactless payments.

networks and deliver relevant services.”

It was also found that levels of trust have increased significantly among UK consumers, with 52 per cent rating their bank trustworthy in 2014 compared to 43 per cent in 2012. The number of people who would consider recommending their FS provider in the next 12 months has risen from 46 per cent in 2012 to 54 per cent this year, and those who believed their bank was fair and transparent increased from 41 per cent to 51 per cent in the same period.

According to the survey, 47 per cent of UK banking customers who wanted to switch their current accounts were held back by the perception that other current accounts would be no better than their existing ones. Fifty per cent of the respondents didn't know which banks to switch to. Meanwhile, 21 per cent would consider moving to non-bank organisations, such as an online payment provider or post office, and 15 per cent would look at retailers, if they were to offer current account services.

EE customers will soon be able to travel around London's tube, DLR and Overground networks using their mobile phone to make payments. The initiative follows on from Transport for London's announcement that it will launch contactless payments across its network on 16 September. The service will use EE's Cash on Tap app, which is due to be compatible with over 500,000 customers' handsets this year. Gerry McQuade, chief marketing officer, EE said: “Users of the world's greatest tube network will shortly benefit from the latest in mobile payment technology, allowing them to use their phone to pay for their daily commute. As more

and more people benefit from the simplicity, convenience and security that mobile contactless payments offer, it's rapidly becoming clear that the days of the physical wallet are fast becoming numbered.”

The European Central Bank (ECB) was approached by cyber criminals demanding a ransom after information was stolen from its website. It confirmed that there had been a breach in the security system protecting a database serving its public website. This led to the theft of up to 20,000 email addresses and other contact data left by people registering for events at the ECB. However, the Frankfurt-based bank said that no internal systems or market sensitive information were compromised. The ECB revealed that the theft came to light after it received an anonymous email seeking financial compensation for the data. While most of the data was encrypted, parts of the database included email addresses, street addresses and phone numbers that were not. It is contacting people whose personal data might have been compromised, and all passwords have been changed on the system as a precaution. The bank said that it took data protection “extremely seriously” and that it had informed German police of the theft, which was now being investigated.

Consumers made 19.7 million contactless transactions across the UK in May 2014, an 18 per cent



Mobile payments on the buses.

increase on April. According to Visa Europe figures, more than 37.8 million contactless cards have now been issued by UK banks, a 35 per cent increase on the same period last year. May set a new record for the total value of transactions made by these cards in the UK in a single month, reaching £126.7 million, a 14 per cent increase on April. The average UK transaction value in May was £6.43, up from £6.09 during the same period last year.

The amount the global insurance industry spends on IT will reach more than \$104 billion by 2018, according to new research from Ovum. CIOs were expanding their IT budgets to drive a new set of IT priorities as insurance market conditions improved, it found. In mature markets, there was a focus on improving operational efficiency and organisational flexibility, while in developing markets, close attention was being paid to expanding core platforms and infrastructure to support growth. The sharp decline of new business across all life insurance markets due to the credit crunch led many insurers to significantly cut their IT budgets. However, accelerating year-on-year growth in 2013 has caused life insurers to move from cost-cutting to investment in strategic IT projects, the analysis showed.

IN BRIEF

Lloyds has added a fresh range of features to its mobile banking app. Five million customers now use its digital services, with over 1.5 million logins each day. Its updated app for iPhone and Android devices now includes an express login, plus the ability to open new accounts for different banking products, with side-by-side comparison of different savings accounts.

QuestBack's employee feedback platform has been chosen by RSA Group. Its Enterprise Feedback Suite will underpin the insurance company's YourSay programme, which looks to capture feedback from its 23,000 staff. RSA Group will use QuestBack for its employee survey and event-driven and more targeted activities.

first direct is taking its brand onto the High Street for the first time in its 25-year history. It is installing 12 branded cash machines at various UK railway stations. The bank says that the ATMs have been designed to resemble the iconic 'Space Invader' machines and household scales, and will carry the black and white livery of the first direct logo.

More than one million people have registered with their bank or building society for Paym since the service launched in April and just over £6.5 million has been sent. Customers of Bank of Scotland, Barclays, Cumberland Building Society, Danske Bank, Halifax, HSBC, Lloyds Bank, Santander and TSB can send and receive Paym payments. Later this year the Payments Council-backed service will become available to more than nine out of ten current account holders.

Room for innovation

[There was a wealth of sessions to choose from in the four different conference streams at this year's PayExpo, held at London's Excel in June. Michelle Stevens reports]

Delegates in the Future of Payments theatre heard presentations from digital currencies NXT Coin and Bitcoin, as well as a variety of banking leaders debating regulation and international payment ecosystems in the panel discussions. But given the future-focused title of this conference stream, mobile was inevitably going to grab much of the airtime, and the speaker sessions did not disappoint. "All of us recognise the increased move of customers towards mobile devices," said Ben Green, head of mobile and payments at Santander, adding that the UK had developed an "app culture".

Some 15 million people used mobile banking in the UK, and an analysis of Santander figures showed that customers logged in an average of 25 times a month, Green explained. 7am in the morning and 4pm on Friday afternoon generated the most traffic, which presented an opportunity for banks to target rewards or promotions at the beginning of the weekend.

"This is not about chucking ads in,"

continued Green. "It's about innovating around that experience and giving people something richer than that." He also added that they were opportunities still to be taken for banks to partner with technology specialists and retailers in areas like mobile wallets, offers and the payment experience side. "The holy grail

"There is little room for innovation in the payment process, but there is a lot in the overall purchase experience"

for me is optimising the use of this channel by using the data we have on customers and taking friction out of the payments journey," Green concluded.

However, while multi-channel banking and retail e-commerce are reaching a mature stage

in the UK, many territories in Eastern Europe and Africa have been making greater strides in contactless and mobile payments. Mobile in particular has become an important payment stream in countries where significant portions of the population do not have a bank account.

Picking out this theme, a morning session at PayExpo saw the spotlight shone on Turkey and its adoption of mobile payments and digital wallets. Consumers in the country have already been able to access cash from ATMs

using a code sent to their mobile phone for a number of years – far longer than in the UK. And in a population of 75 million, 20 million people are unbanked – but there are 64 million mobile subscriptions, offering an opportunity for retailers, telecoms operators and banks to reach customers though their handsets, the



Santander sizing up to UK's app culture.

audience heard.

Turkcell, the largest mobile network in the country with 34 million subscribers, has rolled out mobile payments, pre-paid cards and a digital wallet. Its mobile payments facility was already used by four million customers and 1,300 merchants, said Duygu Inanç Koyunpinar, senior product manager at Turkcell. "Who uses it?" she asked. "Customers who don't have credit cards or don't want to give their card details to websites for security reasons, and customers who prefer to use their mobile phone for convenience."

The Turkcell Wallet also launched in 2012 on Android, iOS and SIM-only, reaching more than one million customers – 70 per cent of whom were unbanked, and often in remote locations or with irregular incomes. The wallet could be loaded with cash or card details, said Koyunpinar, with merchants able to accept payments through existing Turkcell-enabled terminals. "We are not a competitor to banks in Turkey," she added. "We are a complementor and reach customers they can't."

Another company making a foray into this space was Turkey's Interbank Card Center (BKM) – which also rolled out a national digital wallet service at the end of 2012. Called BKM Express, customers can log in either online or via a mobile app, with the ability to load payment cards and transfer money between mobile numbers. So far, 15 banks and 450 merchants were onboard, said Soner Canko, CEO at BKM.

She explained that customers favoured the ability not to share payment card details directly, and that security was always at the forefront of the interbank group's payment developments. "If customers lose trust it's irreparable for us – so it's very important to make [digital wallets] secure."

A BKM pilot for face-to-face, contactless transactions was also on the cards, Canko added, as well as a reciprocal deal for Turkish customers to use their digital wallets abroad in Spain and vice versa.

One FI already making inroads in

the Spanish mobile payments market is Banco Bilbao Vizcaya Argentaria (BBVA). The bank launched its BBVA Wallet with a contactless payments system using a mobile phone sticker – which also means customers can pay with their iPhone as the sticker solution uses NFC. Explaining that the bank would be constantly adding features to the wallet over the next year, Luis Uguina, global head of remote channels and new digital business at BBVA, said: "There is little room for innovation in the payment process, but there is a lot in the overall purchase experience."

Functionality on the cards for the BBVA Wallet includes mobile coupons, a campaign engine, a loyalty card offering and a business edition for retailers and SMEs. International payments were also on the horizon, added Uguina, with roll-outs in Chile, Mexico and USA pencilled in for the end of this year.

Jas Negi, Standard Chartered's head of channels, transaction banking Europe, outlined to the conference the potential impact of mobile payments in emerging markets – particularly in territories in Africa and Asia, where large sectors of the population were unbanked. Botswana, for example, had 150 per cent mobile phone penetration but only 30 per cent of the population were banked, he noted.

Aside from promoting financial inclusion, encouraging mobile payments would also have the effect of moving many cash transactions back into the formal economy, generating income for government coffers and boosting GDP. Consumers, especially in remote locations, would have a more convenient and secure way to pay, without waiting to access cash, Negi explained.

He added that the benefits for business included a reduced cost of handling cash and increased customer footfall. Meanwhile, for financial institutions, mobile payments could encourage the uptake of bank accounts. The potential of "220 million new entrants to banking globally is a huge incentive for anyone to support this initiative," Negi concluded.

QUOTE / UNQUOTE

Choice quotes from this FStech

"Is there an appetite among customers for a Facebook or Apple to take the banking world by storm? I'm reminded of when contactless cards were introduced a few years back. There were all sorts of grandiose claims; a cashless society was nigh. And yet coins and notes still sit atop the payments pile." p. 4

"Banking is...about believing what you are delivering to customers. There is a malaise in UK plc in general; companies think they are in business to make money, that's the wrong way around. It's about giving customers a better product or experience, and the by-product of doing that well is making money." pp. 14 - 18

"Many sectors have outsourced many functions overseas. This was a short sighted decision that had far reaching implications for the industry, education and the future of jobs in this country. A few companies have started to readdress this travesty, but I do wonder what many of our industries would be like if we hadn't made that dreadful decision." p. 20

"It takes bravery to open the doors and listen to customers. But they (the banks) have to re-invent themselves. Many CEOs struggle to bring in change – because many people and shareholders are reluctant – but they must promote up the people who have the vision." pp. 30 - 31

FOCUS

2014 FStech/Retail Systems Payments Conference
IoD Hub, London
06 November
www.fstech.co.uk/payments

The payments market is changing rapidly. New non-traditional, digitally savvy entrants have entered the fray and smartphone penetration has really shaken things up. Contactless is finally starting to gain traction, there are various new technologies vying for attention and even mobile wallets (much hyped, but with little to show for it thus far) are being tipped for take off in 2014, reinforced by the likes of tokenisation, digital identity and HCE.

But, as the payments race heats up, how do retailers best create an omnichannel experience for their customers, how do financial institutions adapt their business models and how does the payments market as a whole build trust in new technologies?

Senior figures from across the retail, financial services, technology vendor and telco sectors will come together at the 2014 FS

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**PAYMENTS
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coming up

[FS

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New York
Website: www.finovate.com/fall2014

29 September-02 October: Sibos 2014
Boston
Website: www.sibos.com

08-09 October: IP Expo
London
Website: www.ipexpo.co.uk

30 October: 2014 Retail Systems Awards
London
Website: www.retail-systems.com

06 November: FStech/Retail Systems Payments Conference
London
Website: www.fstech.co.uk/payments

12-13 November: Apps World
London
Website: www.apps-world.net/europe

20 November: FStech/Retail Systems Payments Awards
London
Website: www.payments-awards.com/awards

10-11 February: Finovate Europe
London
Website: www.finovate.com/europe2015

11-12 March: Cloud Expo Europe
London
Website: www.cloudexpo-europe.com

26 March: 2015 FStech Awards
London
Website: www.fstech.co.uk/awards

30 April: Engagement & Loyalty Awards 2015
London
Website: <http://engagementandloyalty.com/>

02-04 June: Infosecurity Europe
London
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Core challenges

FIs are facing up to huge changes to their core banking systems, as new entrants and digital startups nip at their heels. Glynn Davis reports

What were once among the major banks' biggest assets have over time been transformed into their biggest liabilities and such is their cobbled together nature that they have even been likened to Frankenstein's monster. We are talking core banking systems (CBS). Banks are operating with these legacy systems sitting at the very heart of their operations, which were initially designed to support just their branch networks, but now also service myriad attachments such as online, contact centres, ATMs and mobile technologies.

John Schlesinger, chief enterprise architect at Temenos, says the mindset of CBS personnel has been to add new requirements to the overnight batch process rather than undertake them in real-time, which has added great complexity to their legacy systems and made them incredibly unwieldy to update for today's digital world.

This scenario has come at a time when he says a number of revolutions are taking place in retail banking: banks are moving from branches to online; regulations are reducing margins; there is a need to reduce costs; and customer loyalty is plummeting as regulations are beginning to come into force that make it easier for consumers to move accounts. Against this backdrop there is a growing threat from upstarts like Atom Bank who focus on high levels of customer care, run on low margins, and can handle high volumes of enquiries in real-time through utilising new technology and modes like the cloud.

He points to the fact that this new type of banking has many of the attributes of digital heavyweights like Amazon, Facebook, Apple and Google. As such they represent a real threat, according to Schlesinger, who cites the chairman of Spanish banking group BBVA warning that anybody who does not believe these businesses will enter retail banking is facing a major problem in the future.

While the banks remain IT-led rather than business-led – and CBSs are seen as an IT area – then none of the large organisations will likely make the necessary changes to their infrastructures. Mark Yamin-Ali, global sales director for core banking at Misys, says: “The huge banks can afford to spend hundreds of millions to maintain their existing systems to keep the technology alive because for them change is unthinkable.”

But go below the top tier and he points to a desire by companies to develop more agile systems that will enable them to become more product-focused rather than hide-bound by old systems. He cites a major Middle East-based bank that is very retail-focused and has been able to launch numerous clever initiatives and tie-ups such as adding airline points to account transactions. “For a massive bank, this wouldn't have been possible without it taking ages, but for this business they've been able to change and add these new front ends.”

What's up down under?

There have also been some interesting developments in Australia where Suncorp Bank is dedicating AU\$270 million to changing its CBS by mid-2016. Working with Oracle, Thoughtworks and Wipro the project involves decommissioning 12



out of its 17 existing legacy systems, re-engineering as many as 580 processes, and removing the massive levels of duplication that currently exist. John Nesbitt, chief executive at Suncorp Bank, says: “We’re going to change all the core systems and we’re going to change the way we work across the bank for customers. It’s much more than just a technology project; it’s a complete transformation of the bank. In two years we’ll have a new bank. The level of simplification and automation it provides will enable us to respond to emerging customer needs, it will cost less, and we’ll be much faster to market. Being nimble in embracing technology will provide a real advantage over our regional peers, and enhance our position against the majors.”

Other Australian banks that have also undergone similar changes include Commonwealth Bank, which has invested AU\$580 million over a four-year time-frame to modernise its core banking systems, and introduce new features with the help of SAP and Accenture. National Australia Bank also embarked on an overhaul with the AU\$200 million



“RBS had payment system failures last year and the new CEO then confessed to having under-invested in technology for decades. He broke cover. But not many others have done this”

investment in a Nextgen core banking platform, and Westpac has major infrastructure plans afoot.

To help banks make such fundamental changes, Misys has recently launched its FusionBanking Essence solution that uses its modern componentised architecture to enable banks to “invest smartly” in their middle office and front office (digital interface). So while the CBS remains in place, Yamin-Ali says elements can be taken away – such as the lending function – and placed in the middle office in shared applications. Over time the CBS therefore becomes largely irrelevant – involving undertaking little more than credit and debit processing. This approach enables the separate components to be used in other areas of the bank, such as within its corporate banking function and it also allows for upgrades to easily be done on these individual parts.

Alex Kwiatkowski, head of financial Insights for Europe at IDC, is an advocate of taking such a “progressive transformation



rather than a 'big bang' approach" that he believes would have far too much risk attached. "Banks need to build a new system in parallel, test and implement, and then move the customers across," he says, adding that ideally in the future the CBS will involve all the component parts being sourced from a single vendor that can then all be easily integrated.

Newcomer into the market Metro Bank has taken this approach and takes all its CBS components from Temenos in a hosted form, whereby it pays for the capacity that it requires. This frees it up to concentrate on its key points of difference; its products. These new flexible systems allow the likes of Metro Bank to launch new products in days rather than months, which is all too often the case with the established operators, according to Kwiatkowski.

The one upside for banks facing such monumental change to their CBS is that they are not waiting on the technology to catch up to their requirements. Instead, the real challenge for most is

admitting that there is a problem with their legacy systems in the first place, and to then make the painful decision to commit the hundreds of millions of pounds that these projects invariably demand. He cites RBS as a rare example of a major player admitting to having problems: "RBS had payment system failures last year and the new CEO then confessed to having under-invested in technology for decades. He broke cover. But not many others have done this."

Kwiatkowski says banks must also consider more radical approaches such as outsourcing their CBS activities in the same way that they are offloading other increasingly commoditised parts of their businesses. Schlesinger believes this could be a major feature of retail banking in the future, with many banks not having their own CBSs, preferring to instead buy white label solutions in the same way the mobile phone industry provides the platform for MVNOs (Mobile Virtual Network Operator) to be operated by retail brands.

Such an arrangement would work in a similar way to the card schemes offloading their credit card processing requirements to third parties. "It could be like Amazon Web Services for core banking services," says Schlesinger, which, although it sounds like a threatening scenario for financial services firms, it might actually have the positive effect of concentrating their minds on the most important aspect of their organisations – serving their customers with differentiated products.

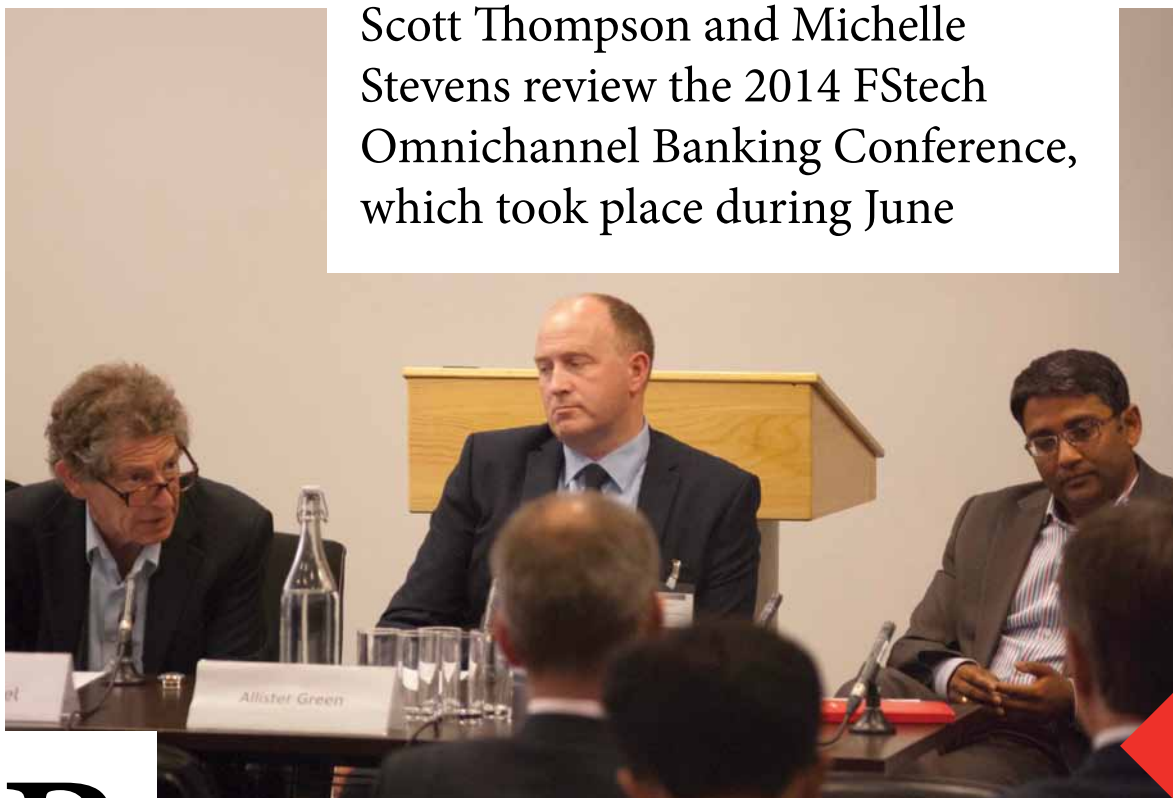
This is something that has been somewhat lost over recent years as banks have continued to focus on keeping their CBSs on the rails. The opportunity is clearly there – for those firms that accept the challenge of overhauling their core legacy systems – but first they must accept the reality of the situation around them.





Digital champions

Scott Thompson and Michelle Stevens review the 2014 FStech Omnichannel Banking Conference, which took place during June



Banks with omnichannel aspirations must shake off legacy issues and old ways of working/ thinking and start acting more like start ups. That was one of the key messages to come from the 2014 FStech Omnichannel Conference. The event, returning after a successful 2013 debut, was held at the IoD Hub, London on 19 June.

Paul Beadle, head of consumer and social media, Nationwide, Anthony Thomson, founder, Atom and Allister Green, business development controller, Cumberland Building Society headed up the conference. Also giving presentations were Nic Cumisky, senior industry manager, Google and Nick Hungerford,

"I like Metro Bank's desire to rip things to pieces."

CEO, Nutmeg. In addition, there were two discussion panels: The High Street's not dead: what will the branch of the future look like?; and Customer focused banking: implementing omnichannel strategies.

Nationwide's Beadle kicked things off with a presentation entitled, The role of social media in the digital building society. Nationwide has in recent times rolled out a new banking platform, mobile banking app and a range of other initiatives. Against this backdrop, Beadle explored the challenges and opportunities that social media offers in supporting the digital society. "We are an old company but the root of building societies is in innovation," he said.

Nationwide created a social media team in September 2011; a month later came the @NationwidePress Twitter account and by the end of the year it had set up a social media forum of key stakeholders and overseen the creation of governance. 2012 brought online monitoring and launches on Facebook, Twitter,

YouTube and LinkedIn. And earlier this year, it laid claim to being the first High Street financial services provider to offer its customers 24/7 Twitter coverage. The building society uses the site to answer questions and queries via its @AskNationwide account, as well as providing customer service information and support. @AskNationwide will also be used alongside the www.nationwide.co.uk website and other social media sites to promote information for customers such as guides and how-to videos.

Tony Prestedge, chief operating officer, said at the time of the launch: "The massive success of our mobile banking app proves that people want to be able to manage their money on the move and at any time of day. With that in mind, we have opened up our popular @AskNationwide Twitter to ensure our customers can also Tweet us and get a fast response at any time of day. In the short time that businesses have been using social media, Twitter has quickly become the channel of choice for customers who want to talk to companies, whether it is to ask questions or share their opinions. Yet so many organisations are either not using Twitter properly or see it as a poor relation to traditional channels such as the phone. At Nationwide we have embraced Twitter and are using it as an integral part of our customer service and support strategy."

"A few years ago it was hard to get social media through the door but things have quickly changed," Beadle observed. "People hate us a lot less than other banks and actually lots of them like us, so we have a good base on which to build a social media presence. It starts to blur the lines between customers, employees and bosses and gives us a personality that people seem to like."

As for the biggest cultural challenge, that would be "the accountants, those guys in their 50s who see social media as something their kids do...you can do as many reports as you like, but when it comes to something new like this you need a bit of bravery."

Next up was Cumberland Building Society's Green who said that it was pleasing to see two mutuals kick off an omnichannel banking conference. "It's usually the preserve of the banks, but mutuals are also moving in to digital."

In January, Cumberland Building Society became one of the first current account providers in the UK to launch a P2P mobile payments service. Later this year it will be one of just six institutions, and the only building society, to be part of the launch of the Payments Council's industry-wide mobile payments service, Paym. Its internet and mobile banking services complement its branch network and allow its members to combine traditional personal service with the convenience of being able to access their account whenever and wherever they are. The ability to implement and adapt new technologies and channels, balanced with a commitment to traditional building society values, proves a mutual can continue to be relevant in a fast changing world, Green argued.

Paym in particular has helped raised its profile. "For the first time, instead of having to badger the press for coverage, they have been contacting us," Green observed.

Cumberland Building Society has 34 branches offering the likes of mortgages and savings, current accounts, business banking and financial advice. It is not alone in being rooted to the branch network, but Green said that the mutual has addressed this issue. "Kids are not going to want to go to branches to open accounts so we have made the leap online with our current accounts." But as the physical relationship diminishes, how do you main it remotely? "It's about avoiding the clamour of the new, not just jumping into Twitter for instance; you need to get the timing right...As for what the future holds, we have to keep moving; these are challenging but very exciting times for the FS sector."

Green was followed by Neil Whitaker, business development manager, finance, Aspect Software, with a presentation entitled, Omnichannel Made Easy. He explored the opportunities presented by an omnichannel approach to customer engagement that both enhances the customers experience and delivers a positive ROI. Most organisations are failing to cover the basic principles of customer engagement through mobile and digital channels. Whitaker discussed the omnichannel opportunity and benefits case and demonstrated the approach, the key principles, and discussed the technology and organisational changes that are needed to embrace customer mobility and the omnichannel relationship revolution.

"Amazon is making life easy for the customer and we are seeing that migrate to the FS sector," he said, adding that, "it's great to have all the technology pillars in place but the risk lies in trying to tie them all together. The time is now to move away from isolated technology pillars as the challenge is only going to get worse."

Up for discussion

The retail banking sector has reached a



“Amazon is making life easy for the customer and we are seeing that migrate to the FS sector”

customer service crossroads. On the back of the online and mobile revolutions, customers are increasingly demanding 24/7 access to accounts and services. But how are banks faring when it comes to their customers' requirements across a range of channels? Progress has been made in some areas but there still many more changes and challenges to be tackled. With this in mind, the first discussion panel of the day looked at the following: Banks and customer service: the current state of play, who is doing what well?; The established High Street banks vs new challenger banks: are legacy issues holding back the former, creating an advantage for the latter?; The technology available to address this customer-led revolution; How will the customer-centric bank of the future differ from what we have today?

Panellists as follows: Joy Bhattacharya, managing director, Accenture Interactive; Gary Munro, principal consultant, Consult



“It's not rocket science; it's about getting the basics right.”

Hyperion; Morris Pentel, chairman, Customer Experience Foundation; and Cumberland Building Society's Green.

“No one is doing this particularly well, although I do like Metro Bank's desire to rip things to pieces,” said Pentel. The bank, which opened for business in 2010, has continued its expansion in 2014, most recently opening its 27th store in Milton Keynes Oakgrove with eight more stores on the cards this year. It now has more than 320,000 personal and business customer accounts and recently announced quarter one results which saw significant growth across lending and deposits; with year-on-year increases of 298 per cent and 131 per cent respectively. The venture puts a big emphasis on customer service and convenience (one of its slogans is ‘love your bank at last’). Green argued that on this front there is a lot the FS sector can learn from Amazon. “It's not rocket science; it's about getting the basics right. Social media has changed everything. It's much easier to complain.”

“We capture a lot of data but we are not organised enough to understand what that means,” observed Bhattacharya. Pentel responded: “We are in some ways at the dawn of the age of insight. We're collecting more and more data but are some way off understanding and drilling down into it.” He added: “We are going to have to find new ways to interact with the customer in order to rehumanise the experience. In some ways technology innovation is dehumanising it. It's about reengineering the customer relationship and building in points of contact that work for them.”

As for legacy issues, Pentel argued that Metro Bank has been able to leverage new technology, while Bhattacharya said that the banking establishment can't continue to be held hostage to legacy challenges as it will be the death of them. And in fact many are now refusing to play the victim. “There are numerous transformation projects going on. A new entrant coming to the UK market needs 10,000 customers to break even. When you grapple with that, legacy issues are almost preferable. The real issue is, how do you take advantage of your brand image?”

Moving on to the customer centric bank of the future, it will, according to Pentel, increasingly reflect our attitudes as customers. “Beyond the technology piece, our banking relationships could be much more difficult.”

The pace of change is so fast, Green commented, that it's difficult to say what the bank of the future will be like. “There is lots of apathy around the banking industry, nothing is forcing them to change. When that will happen I don't know, but when it does happen big changes will occur.”

A technology being put into practice in both the banking and retail sectors is the use of advanced virtual avatars for customer service purposes. “When you have a virtual person that understands natural language and links into customer service systems, you can automate any conversation,” explained Chris Ezekiel, founder and CEO, Creative Virtual.

He used the example of ‘Lisa’, Network Rail's customer

service avatar, which deflected queries from the call centre by pointing people to web Q&A links and real-time travel information feeds. There was the opportunity for the cross-selling and up-selling of tickets, as well as the ability to post answers back onto users' Facebook walls. Creative Virtual was using similar technology with the Central Bank of Dubai in its customer contact centre, the delegates heard, which was resulting in an average time reduction of 30 per cent per query.

Avatars could also help project a brand identity across digital channels, said Ezekiel, adding: "Organisations have to engage with customers and provide a consistent message in an omnichannel world."

Next to take to the stage was Anthony Thomson, the founder of Atom, the UK's first digital-only bank scheduled to open its doors next year. But Thomson is also well known as the co-founder and chairman of Metro Bank, which by contrast, was the first new bank in more than 100 years to open branches on the High Street back in 2010.

Thomson explained that his new Atom venture was focused on digital, because data showed a decline in branch use and an explosion of digital devices. But Metro Bank was also conceived to focus on giving customers a better banking experience, albeit in a physical location, he told delegates. "I don't care how customers interact, I just want to give them a great experience," he said. "I went into banking because I saw an opportunity to create a different bank, and I've seen one again now."

He explained that at Metro Bank "advocacy was critical", as eight out of ten customers said they would recommend the bank to a friend, and half of account openings came about that way. Its popular coin counting machines – also featuring a children's money counting game – which are installed at various branches cost £15,000 each, but did not generate any income, he continued. "There was no measurement of ROI, but a belief that if you give customers a better experience it will give you more of their banking."

Thomson added that there were also no sales target: "If you set people sales targets for 30 per cent of their income there's a fair chance they will sell you something, but it's not commensurate with good customer experience and putting the customer first."

The audience also heard that when setting up the company, the founders lost £100 million in promised funding the week Lehman Brothers went bust in 2008, but that the team was determined to secure the means to launch. "Banking is not about channels, it's about believing what you are delivering to customers," concluded Thomson. "There is a malaise in UK



Chair for the day, Professor Steven Furnell, kicks things off.

plc in general – companies think they are in business to make money, but that's the wrong way around. It's about giving customers a better product or experience, and the by-product of doing that well is making money."

Banks should also be capitalising on "using data insights to reach people on a one-to-one basis," Nic Cuminsky, senior industry manager at Google, told attendees. He explained that connected devices were "pervasive" in most people's lives, which meant that customers now had multiple touchpoints with banks. By using browser analytics tools and their own log-in data, there was more opportunity for banks to target specific product advertising to customers at the right stage of their life cycle, Cuminsky noted.

He also touched on the new trend for wearable tech, which some banks have already been exploring. "Connected wearable devices are getting more capable in what they can do for customers, and a lot quicker in uploading information," he added. "If you focus on the user, then everything else will follow."

However, the financial services sector was particularly at risk of disruption from evolving technology, new entrants and competitors from outside the industry, cautioned investment management firm Nutmeg. The company's CEO Nick Hungerford noted that research had revealed one-third of Brits were open to switching their bank, while 70 per cent believed the way they paid and accessed money could be entirely different in five years' time.



He said that parts of the financial sector “were nibbled away at more and more, year-on-year”, and that if this represented 10 per cent across each department, it would become a significant concern for FS organisations as a whole. “Disruption comes from customer needs – the real challenge is to anticipate them much better than they do themselves,” said Hungerford. He added that the industry “can’t be resting on its laurels,” as if those customer needs were not met, some business models “could get designed out.”

Ed Kaznowski, head of analytics at Nutmeg, also argued that customer profiles were changing, as traditionally defined life events (such as marriage, children, house buying and retirement) were becoming more flexible in terms of timelines. But customer relationship management was still crucial. “User experience is increasingly important – especially as so much is online and not face-to-face anymore. Trust is still indispensable, and always will be in finance.”

Talk turned to the future of in-branch technology in the afternoon’s panel session, which comprised Can Kekevi, managing director at Accenture, Andrei Charniauski, research manager at IDC Financial Insights and Dai Davis, an IT law partner at Percy Crow Davies. The decreasing use of physical networks has

been well documented, but Davies argued that Deloitte survey statistics showed that 60 per cent of customers would not join a bank without an accessible branch, and that “footfall was still important in maximising the value of customers.”

New technological possibilities could also reverse the perception that banking was becoming more impersonal, using the examples of wearable technology alerting a bank to a customer’s arrival, as well as a 360 degree booth for live chats with bank advisors. Charniauski agreed that while the number of customers who wanted to visit a branch had declined, it would never reach zero. “You will always get a group of people who need financial advice,” he noted. “But there are new methods for banks to employ to speak to their clients – whether that be video, Skype or something else.”

Technology could be utilised to help High Street outlets stay open for longer, he added, while branch space could be opened up by removing permanent teller windows and allowing cashiers to offer more sales services out on the store floor.

Meanwhile, there was also an opportunity to make in-branch cash machines more innovative, said Kekevi, as well as offer additional services like instant payment card issuance at branches.

But it was important for FS firms to ensure that the economics of future innovations worked, he highlighted, and for banks to understand a customer’s life cycle better and what products they could therefore tailor to them. “The future of banking should be data,” concluded Kekevi. “Banks know more about you than any other company, and should use that to increase personalisation across different channels.”

Further information on the conference can be found at: www.fstech.co.uk/conference



Nationwide’s Paul Beadle discusses the role of social media in the digital building society.



How Barclays improves client experience with Voice Biometrics

Barclays implemented FreeSpeech from Nuance Communications, an innovative speakerverification solution. The technology authenticates the caller while ensuring the flow of the call is not interrupted. Find out the benefits of doing so in this Case Study and how Barclay's customer experience was improved by visiting the below whitepaper.

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www.fstech.co.uk/nuance

Paul Hanks, chief technology officer, Atom

FStech: How did you get into the sector?

Paul Hanks: I have always had a passion for technology, even when I was at school, which was a very long time ago. Something that I had and still remains with me today, is the wonder of how things work, or more to the point how they should work. I was always interested in electronics, designed and built my first digital clock at the age of 12 (this was many years after destroying countless telephones in my mum's home when I was small); the clock, although a little large, worked. I then went on to build a metal detector, which I never found anything with, but it looked good. At that time computing wasn't publicised as a career, in fact, most people had never heard of computers. I came across the industry by accident; after I finished my HNC in electrical engineering I joined Honeywell and later Tandem Computers. This was the start of a happy career in the industry. I entered at a time of tremendous growth and major advances in technology, such as the introduction of silicon chips and simplified programming languages.

FStech: Who has been the biggest influence on your career?

PH: I don't have one. I have taken guidance from a variety of people over the years, however, I have tended to make my own way in life; part of the journey is to try things, good and bad, these are the main influences. But if I had to choose one it would be my wife, who has been supportive in all that I have done, that is as long as we could pay the mortgage.

FStech: Who in the sector inspires you?

PH: The obvious one would be Steve Jobs, he had tremendous vision and drive. But there are many who work in the background who never get the limelight that they deserve. Without these people, their ideas, drive and passion, many brilliant ideas would never come to fruition. Teamwork is an underestimated word but one that is so important.

FStech: Which IT professional do you most admire?

PH: The industry is full of good, clever people, it would be impossible to single one out.

FStech: Is there anything that you dislike or that frustrates you about the sector?

PH: The fact we have outsourced many functions overseas. This was a short sighted decision that had far reaching implications for the industry, education and the future of jobs in this country. A few companies have started to readdress this travesty, but I do wonder what many of our industries would be like if we hadn't made that dreadful decision.

FStech: What technology can't you live without?

PH: My iPhone; it seems the whole world revolves around these.

FStech: How do you relax?

PH: Several things...I bake and have done for many years, cut the grass, making sure I have parallel 18" diagonal stripes (sad) in the grass, read and enjoy the family. Free time is precious these days. We have to cram so much into a small window.

FStech: What was your last banking experience both online and on the High Street and were they positive experiences?

PH: My last banking experience was faultless, where I needed to move funds around, but my expectation was it shouldn't be a problem anyway. I don't tend to go to the High Street if I can avoid it. I have better things to do, that is with the exception of going into the coffee shops.



Atom: New kid on the digital block.

FS*tech*



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Evolve and grow

Giovanni Angelini, senior VP and general manager, EU, Western Union, tells FStech why his company is well placed to maintain its position as a global payment services leader, across multiple channels and platforms



FStech: On the back of the online and mobile revolutions, customers are increasingly demanding 24/7 access to services. How is Western Union faring when it comes to their customers' requirements across a range of channels?

GA: In Western Union's experience, our consumers are not looking to go cashless, but want multi-channel solutions, of which cash remains an important part. While cash holds a strong preference to instantly fund spending, there is a new group of consumers with evolving preferences seeking the flexibility to use a variety of channels (retail or electronic) based on their own need and convenience or that of their receiver. We are driving the next generation of money transfers around the

world in real-time; allowing consumers to send money from a retail location into a bank account or mobile wallet; to send online, from a bank account or an ATM into retail or a mobile wallet etc. Providing both senders and receivers their choice of channel is a key element of our money transfer strategy. We want to increase access points for our services so consumers have the choice of interacting/transacting with the company based on their individual preferences.

Our online money transfer service is available via 24 WU.com transactional sites around the world. On the mobile side, we currently have 20 mobile programmes live in 18 countries worldwide, and a highly-rated mobile app live in the US and Australia. We're working on rolling out the app to new countries, and see mobile as a key part of our growth strategy.

We believe that we are uniquely positioned to connect the digital and physical worlds for money transfer. We are working to create an integrated experience where the power of mobile technology supports our retail network capabilities, and gives

consumers an easy way to send money to nearly anywhere around the world, from the palm of their hand 24/7. As reported in our Q1 2014 results, we've been steadily growing our electronic channels – online, mobile money transfer, account-based money transfer. Electronic channels represented six per cent of total company revenue in the quarter. Online C2C transactions via westernunion.com alone increased 55 per cent in the quarter, and revenue increased 45 per cent.

FStech: The established FS players vs new challenger companies: are legacy issues holding back the former, creating an advantage for the latter and, bearing in mind that you guys have been on the scene for many, many years, where do you sit here?

GA: Western Union is a 160+ year old company. We sent 700 million+ transactions in 2013 – that's an average of 29 transactions per second. On top of this, we have a huge retail network – more than 500,000 agent locations around the world that serve as the basis for most consumers' interactions with our company. We have certainly witnessed transformations within the industry, increased competition from emerging companies, emerging technologies, etc. The main challenge for the industry as a whole right now is the compliance and regulatory environment that continues to evolve, and with it, the complexity of addressing compliance and regulatory requirements in 200+ countries and territories. We consider our compliance and risk management systems to be a competitive advantage and, in addressing these additional compliance requirements, are ensuring that we are well-positioned to maintain our position as a leader in global payment services, across multiple channels and platforms.

FStech: The comment was made at a conference we held recently that companies with omnichannel aspirations must shake off old ways of working and start acting more like start ups. Would you agree and if so are you seeing signs of this?

GA: The legacy issue is interesting for organisations like Western Union. In some cases, it can present a challenge – evolving based on 160 years of history, and creating an integrated experience across online, mobile and retail in more than 200 countries and territories, is difficult. But in total, the

“Our consumers are not looking to go cashless, but want multi-channel solutions, of which cash remains an important part”

brand legacy and credibility represents a significant opportunity. We have trusted relationships with millions of consumers, many of whom have only used WU in the retail world. If we can build upon this loyalty, and help consumers complement their retail experience with digital service offerings, that presents an opportunity to position ourselves for long-term success, and create a much deeper relationship with consumers whose preferences are clearly shifting toward digital. I would say that the issue is not 160 years old or start-up. It's how you can bring innovation to the fore and build upon legacy, while also being very careful not to let legacy get in the way of innovation.

FStech: How will the omnichannel, customer-centric organisation of the future differ from what we have today?

GA: Over the course of our 160+-year history, we have transformed many times to meet the evolving needs of our consumers, and leverage the opportunities presented by the advancement of technology. Our current transformation is being driven by three primary trends – globalisation, urbanisation and the explosion of mobile technology. Corporate evolution is not a singular strategy or set of rules. It's an awareness, a commitment, and a way of doing business. Evolution and transformation are not luxuries. To maintain our competitive advantage, evolution is a necessity.



People on the move



David Sear

Skrill has appointed David Sear to the newly created position of CCO. In June, Weve, the JV between EE, Telefonica UK (O2) and Vodafone UK, made the surprise announcement that Sear had quit his role as chief executive. Siegfried Heimgaertner, CEO, Skrill Group, says: "I look forward to working with David to reinforce our position as a provider of intelligent online payment solutions for businesses and individuals."



Jordi Guaus

Mobile financial services association, Mobey Forum, has appointed Jordi Guaus, head of mobile payments at CaixaBank, as chair of the Board. At CaixaBank, he is responsible for developing mobile payment services. He also project managed Mobile Shopping Sitges, the first NFC trial in Spain. Guaus has served on the Mobey Forum Board of Directors since 2009 and is also chair of the association's Business Workgroup.



James Colquhoun

Calastone, the global funds transaction network, has appointed James Colquhoun, former CFO of AOL's European operations, as CFO. He says: "This is a great business with impressive growth trajectories and exciting international expansion plans. I look forward to developing Calastone's finance function, enabling the company's growth and ensuring the network continues to bring the right innovative solutions to the funds industry."



Tanya Castell

Faster Payments, the UK's immediate internet, phone and m-banking payment service, has appointed Tanya Castell as its third independent director. She has over 25 years' experience in global financial services and joins Duncan Ingram and Nick Caplan as independent non-executive directors on the Board, with accountability for considering the wider public interest, especially the needs of consumers and new entrants to payments.



Paul Chrimes

Social investment network, eToro, has appointed Paul Chrimes as UK MD. Formerly chief operating officer at Swissquote, he has held a number of senior positions at E*TRADE, as CEO of the UK company and senior VP of the international business, developing their retail offering in Europe, Middle East, Asia and Canada. Founded in 2007, eToro is an FStech Awards winner and has more than 3.5 million registered users around the world.



Lucy Dimes

Equiniti, a UK-based business service provider, has appointed Lucy Dimes as chief operating officer. She will be responsible for the management of its business divisions and operations, supporting a client base of 1,700. Her operational responsibilities include managing the end-to-end customer experience, customer service channels, processes and operations, an offshore centre in Chennai, and group IT and project management.



Graeme King

Allianz Global Corporate & Specialty has appointed Graeme King as the senior underwriter responsible for CMT and cyber. A UK qualified solicitor, he has spent over 10 years with niche City law firms representing clients in tech (IT contracts) and intellectual property (patent and copyright) litigation. In his early career, King worked as an IT consultant on leading edge executive information systems in the UK and USA.



James Church

FINCAD is opening new offices in New York and London to support growing demand for its enterprise analytics F3 platform. Alongside this, it has also announced the promotions of James Church to VP product management and Lori Aizer Bryenton as VP marketing. The aim of the F3 platform is to allow financial institutions to effectively manage risk and comply with regulation, while maximising investment opportunities.

FStech

**TalkTalk
Business**

What does ICT agility really mean for the finance sector?

Scott Thompson, Editor of FStech Magazine, recently hosted a video webinar consisting of an expert panel including Paul Higgins from TalkTalk Business and Ian Watt from Ovum, to debate ICT agility in the finance sector. Topics under discussion included:

- How can we revive the agility agenda in a more meaningful way for the finance sector?
- Could empowering the wider business with more influence on ICT investment decisions improve agility?
- What practical steps can the finance sector take to realise greater agility through comms-led ICT - all the while managing the stability of the core infrastructure?

Viewers also had the opportunity to put their own questions to the panel.

The video webinar can be viewed at: www.fstech.co.uk/fst/WebinarICT-Agility.php

Webinar panellists...



Paul Higgins of TalkTalk Business was named marketer of the year at the 2013 B2B Awards. This accolade came from his passion for return on investment and customer understanding. Paul is excited about how we are creating debate around how agile finance companies see themselves today and importantly how technology can help them be more responsive to change, primed for opportunity and resolute against risk.



Glenn Murphy – London and Capital Glenn is a global wealth manager for high net worth individuals. He has over 16 years' IT leadership and operations experience, focussing on the investment management industry.



Scott Thompson is Editor at FStech. He has been working in journalism for 15 years, during which time he has held senior editorial positions at and contributed to a number of business and technology-related publications.



Ian Watt is a Principal Consultant in Ovum's telecoms consulting practice in London. Ian has over 25 years' experience of telecoms markets in over 20 countries worldwide, primarily in market analysis, strategy and forecasting. Recent areas of focus include incumbent, cable and LLU-based operator strategies in the residential 'triple play' space, the B2B telecoms value chain, product bundling, the next generation access business case and government broadband policy.

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The social arena

Hannah Prevett looks at the benefits and challenges around FIs implementing social customer relationship management (CRM) initiatives

Gen Y expects better. Having been born into an 'always on' culture, young people today have higher expectations than their forbears. They want bigger, better and faster. This goes for customer service too. And as companies including the likes of Apple, Google and Amazon cater to their every whim, customer service in other industries, and in particular in banking, is often found wanting.

The recent World Retail Banking Report 2014 from Capgemini and Efma found that for the first time in three years, customer experience globally has declined. The report's authors suggested that this may be due in part to the fact that the needs of Gen Y or millennials are not being met. Also regularly described as digital natives, they want to communicate with their bank on their terms, which will likely include social media.

"The world is transforming," says Joshua March, founder and chief executive of Conversocial, which helps companies manage customer service through social media. "A lot of the banks are realising this now and as a result a massive amount of banking has moved onto mobile and smartphones and that trend is just set to continue. Many of them now have smartphone apps and are shifting their banking experiences to target the younger generation. They are focused on the mobile banking experience rather than the branch banking experience. And people who are interacting with the bank will be doing so

on their mobiles – and social is the natural home for that."

March says that most banking organisations realise that they need to up their game when it comes to improving the customer experience on social media. "At a senior level they realise the future of their industry is interacting with customers on their smartphone and that's where they need to deliver the better experience."

But just because social customer relationship management (CRM) is the order of the day, that's not to say it's easy to implement in practice. Unlike many other industries, financial services companies are shackled by regulations. "The biggest challenge that FS firms face with social is the fact that it's illegal for them to ask for personally identifiable information over any kind of non-secure channel, even privately, which obviously makes it really hard," explains March. "There are lots of other questions that come in which are more technical, questions about how to do things online for example, which they can answer fully, but they do have this challenge that if anyone has an actual account issue, they have to move them off social to answer that."

Getting it right

March observes that the most innovative of banks haven't let regulatory compliance hinder their efforts to get to grips with social. First direct, the telephone and internet bank, has been on Twitter since 2010 and now uses both Twitter and Facebook to field queries from customers. In 2010 it also launched FD Labs, which encourages feedback and suggestions from customers to better improve its service. "As a business, our customer service is what we're known for. We've always been a leader in service and we want to be leading in the social service field as well," says Rebecca Dye, social media manager at first direct.

The bank monitors social media around the clock. "We run social 24/7 just in the same way as we run the phones 24/7," says Dye. The selection process of the social media team is something that has been honed over time, she stresses. "Our best people are the people who've been dealing with customers for a long time. They're very used to the sort of enquiries that come in and it also means they're used to our procedures, our

processes, our systems, so they know what the right response is.”

Clare Wilkerson, who is responsible for channel & customer strategy at Direct Line Group and has spearheaded a social media pilot at Green Flag, the firm's breakdown business, agrees that cherry-picking the right people for the social customer experience role is essential. “We were really careful with the kind of people we recruited to the role. We went for quite a well-rounded, experienced individual who's got complaint handling experience as well as product experience,” she says.

Just because many people use Facebook, Twitter et al in their personal lives, the idea that there is an abundance of social media professionals is vastly misguided, adds Wilkerson. “It's a misconception that it's a really easy skillset to find. It is made all the more difficult because you have 140 characters to write your piece so you may have a whole paragraph or two paragraphs that you have to condense into a short message.”

As at all FS firms, Green Flag's social media handlers will be monitored by senior managers. “We do keep a close eye on the messages that are being responded to and we'll give feedback if

it's not quite appropriate and we'll encourage where there have been lots of good messages,” says Wilkerson.

When it comes to social media, branding and customer experience often go hand-in-hand. If the messages become too serious, the company in question can seem stuffy or unapproachable. “There's a little humour on our page, which is important. We want followers who don't just break down and then follow us and then unfollow. It's about trying to build that community and produce useful content as well that will encourage customers to come and engage with us.”

This can even entail engaging with the enemy on these sites. “There's quite a bit of banter with the RAC and the AA. It just breaks up the Twitter pages,” she adds. “It was a conscious decision to make this very human and not have pre-canned responses and not have robotic responses. We wanted to get across personality.”

But behind the witticisms and wisecracks, there's some serious number crunching going on. Green Flag works with a partner on its analytics. “They can break it down into groupings as to why customers have contacted you: whether it's service-related, breakdown-related, engineer-related or marketing-related,” explains Wilkerson. “You can add various different tags and with that insight you get you can then use those learnings to take back into the business.”

The key technical challenge for any business looking to play in the social arena is around integrating all of the different channels, says Conversocial's March. “It's about being able to provide a really seamless customer experience when you've got to meet these regulatory hurdles, like taking people off social and moving them to live chat or another format, sharing the data across those channels and having to restart the conversation every time.”

He continues: “A lot of the basics have been worked out over the last few years, such as how do we set up the team, how do we train them? Now it's about, ‘how do we start delivering a really awesome customer experience whilst meeting all these regulations?’ That's the next step.”





Bank on disruption



Glynn Davis gives the low down on the Wired Money 2014 conference

the outside world and having more open cultures with 24 hour, 365 days a year, opening times.”

This belief in openness has led him to create Fidor Bank, which he describes as a community-centric business that the community can directly affect through social media sites such as Facebook. It uses its community of followers to talk about money and share their experience, which has led to them rating 8,000 advisors, 3,100 financial products, and providing 7,300 tips on how to reduce spending. Most unique of all is its pricing model whereby the more likes the bank has the less the cost of borrowing to members of the community: “We allow people to co-create pricing so for every 2,000 likes we reduce the interest rate by 0.1 per cent. For the first time pricing is not hidden in the back office, it’s transparent.”

Unusually Kröner believes success is not down to offering the cheapest rates, but instead he says customers really want speed: “Process beats price. It’s about speed, which is why we modelled ourselves on Wonga and Amazon.”

The focus on the community aspect has helped Fidor achieve a cost per customer acquisition of only \$15 versus as much as \$200 for typical High Street banks and it has led it to let developers use its infrastructure via an API. Gareth Mackown, mobile lead for financial services within IBM GBS Europe, also recognises such openness as the key to future success in financial services and believes all firms must adopt such policies.

But although he suggests they need to be more customer-focused with an open doors policy, he acknowledges this will be a tough challenge. “It takes bravery to open the doors and listen to customers. But they have to re-invent themselves. Many CEOs struggle to bring in change – because many people and shareholders are reluctant – but they must promote up the people who have the vision,” he explains.

Listening to customers is now an imperative, according to Nick Hungerford, chief executive at Nutmeg, who says consumers now demand to be more involved in the conversation with their financial service providers. They want transparency, liquidity and communication, he says. This represents a radical shift in the mindset of consumers – particularly among today’s young people – with Hungerford

Operating with a culture of greater openness and transparency (which places customers at the heart of the business) will create financial services organisations that enjoy richer engagements with their customers and help differentiate them from more insular traditional firms. This was a major conclusion drawn from Wired Money 2014, held recently in London’s Docklands; an event that brought together some of the most prominent players who are working hard at changing the face of money and the financial services sector.

One major advocate for this transparency who presented at the event is Matthias Kröner, chief executive of Munich-based Fidor Bank, who says: “All banks could be improved by being open to

citing research stating that 86 per cent of people say they want to sack their parents' financial advisors (who they now use).

By listening to these consumers and delivering a solution that services their new demands he suggests that for Nutmeg and other such open firms there is an "opportunity to get a new generation of clients". This has not been lost on Brett King, founder of Moven, who says the generation that has grown up with the internet are unlikely to go into bank branches and so existing companies run the risk of losing their channel to market.

"Will the kids that watch avatars go into a bank branch to see a person? The advice component – the sales funnel – breaks down in this world. The campaigns of financial services firms are dead and banks using paper application forms that need to be signed are in deep trouble. Twenty five per cent of young people don't even have a signature. They just write their name," says King.

Going digital and putting smartphones at the heart of the dialogue with these consumers is creating a much richer engagement, he adds: "We've seen it with Moven, where customers engage three-to-five-times per day. This [dialogue] also has much better context than the conventional [branch-based] approach and creates new ways to engage and to sell products."

This new approach is leading to new requirements and skill-sets in the financial services industry, with King highlighting some of the roles that he expects to play an increasingly important part in the sector: data scientists; storytellers; behavioural scientists; algorithmic risk officers; and community advocacy builders.

Among all this change Danae Ringelmann, co-founder of Indiegogo, says there is also an underlying potential challenge to the role of traditional financiers involved in fund-raising from firms that utilise the internet for crowd-funding. She believes this is "democratising capital" as well as dealing with risk by providing a platform that can prove there is a need for a product/service as well as testing pricing possibilities ahead of any potential fund raising. Although the likes of Indiegogo could be seen as disruptors to the venture capital industry, Ringelmann prefers to think of the two camps as having a "symbiotic relationship" involving the sharing of deal-flow and the VC firms possibly sourcing information from the crowd-funding platforms.

Get smart

What is undoubtedly a key disruptor to the online payments market is the smartphone. It would have been unusual for the technology not to have featured prominently at Wired Money 2014 and Peter Keenan, chief executive at Zapp, suggests internet payments is the next industry to be seriously disrupted by the technology – following the desktop industry, cameras, mobile communications, and music. However, he says success

will be determined by solutions that deliver benefits to all stakeholders – customers, merchants and banks. "They all need to buy into it," he says, adding that the checkout is quicker for customers and the charges are less for merchants compared with accepting Visa and MasterCard.

The big challenge, he acknowledges, will be to convince consumers that Zapp is the "one to back" versus the myriad other solutions cropping up in the market. "Getting momentum early will be vital," he says, pointing out that there is certainly banking firepower behind Zapp as a group of financial services firms have invested £50 million to develop the solution and have also set aside another £25/30 million to launch the product in the autumn.

But as Keenan acknowledges, there are other players out there – including Klarna which is now active in 14 markets across Europe. Sebastian Siemiatkowski, chief executive at Klarna, says the big problem to date with mobile commerce is that it remains in the "Stone Age" with high levels of friction involved for consumers – with registrations, passwords and downloads affecting the experience.

He cites the likes of Verified by Visa as typical of the "static" solutions that have been developed with the result that "99 per cent of users' experience is ruined by the one per cent of fraudsters". Instead, with Klarna he has developed a dynamic cloud-based app that adapts the user experience to the fraud risk attributed to each transaction. Siemiatkowski says this is possible because, unlike with Visa and MasterCard, Klarna is aware of not just the value of the transaction but also the details of the products/services being bought by the customer.

This focus on the user interface to improve the customer experience was a common theme among the finance specialists presenting at Wired Money 2014 who are using this to disrupt the incumbents. Such a mindset must therefore be adopted (along with enhanced transparency) by the established players if they are to retain their relevance in the future.



Finance Is Doing Technology Right. Why Isn't The Rest Of The Business, Then?



By Howard Frear, Director of Sales and Marketing,
EASY Software UK

Because of the widespread penetration of powerful technology into our everyday lives, it's tempting to assume that all aspects of modern life are as well supported by technology as our ability to access the Web.

This is particularly so in the area of Finance – where, after all the years and years we've had of using back office systems and IT, you may well be surprised to learn that no less than 95% of the 30 billion invoices processed across Europe were done so in a way that involved manual data entry. Yes, that's right only 5% of invoices were processed electronically. (These figures are according to Deutsche Bank and Gartner from 2010).

That data is something that the CFO really needs to take notice of... especially when you add in the fact that such manual processing can push up the cost of processing that invoice by a factor of 20. That equates to a bottom line cost of £80,000 for 20,000 invoices at £4 each (done manually) versus the much lower £4,000 if they were done electronically (so at 20p each).

That's a serious differential in terms of overhead. But that's actually not really the heart of the problem around invoicing at all, though obviously it is concerning. What is starting to bother a lot of people looking at the use of technology in the Finance function is actually the build up of latency.

Has the business caught up with tech yet?

Think of it like this: industry research has shown that of the 100% of time that an invoice is working its way through the system, 20% of it can be accounted for as transport processing time, 5% actual processing – and an astonishing 75% of the time is basically spent idle.

Idle, that is, in the sense of workflows that are so designed so as to need lots of supervisor or managerial attention to get things done. This was made pretty plain in a big piece of research that we at EASY Software commissioned in 2013 that looked at the use of modern EDM (electronic document management) in UK businesses. We found that Finance is blazing the trail in usage of EDM, with 52% of respondents in such teams confirming they were going

paper-lite compared to just 20% of their colleagues in IT (and 26% in Operations/Manufacturing). The motivation was brilliantly summed up by one Finance Director we interviewed, who said: "Cost reductions and increased efficiencies for purchase ledger when distributing supplier invoices throughout the company."

Here's the problem: Finance is getting very expert at using technologies like EDM, EDI (electronic data interchange) and even email to distribute invoices, as well as many organisations taking up the use of Optical Character Recognition (OCR) tech.

But the business isn't keeping up. There's just no reason for that 75% statistic. Businesses now have the technology option to deal with invoices much more rapidly than they currently are.

Where is your visibility into your real cash position?

Some organisations, of course, do like to guard their cash flow – and there is often, in SME contexts but also for enterprises, policies to push payment out as far as possible to protect that.

While there is a legitimate business motivation behind that, there are also two issues that position causes you. One, key suppliers and partners may not be as tolerant of delayed or inefficient payment cycles as you may be. And secondly, even if you don't wish to process a payment 'soon-as,' if you don't have an efficient payment cycle internally, where is your visibility into your exact current cash flow situation? Surely you need clarity here to properly justify keeping hold of an invoice?

The verdict's clear. Finance teams need to take the next step here and look to use technology to not just better capture and route invoices better, but to make their internal handling a much slicker process. The prize: greater transparency, less need to involve human intervention – and an end to invoices spending three quarters of their time in your company essentially doing nothing.

The author is Director of Sales & Marketing at EASY Software UK, a leading provider of electronic data management and invoice processing solutions
<http://www.easysoftware.co.uk>

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Optimising operations



Outsourcing is providing the financial sector with the tools it needs to be more efficient. As contracts evolve, the challenge now is to manage relationships, says Kate O’Flaherty

Until recently, outsourcing of IT was almost entirely fuelled by cost-cutting demands. But now the tool is increasingly viewed as a driver of radical change within financial services companies, partly because it enables businesses to tap into the skill sets of specialist vendors that are not available internally. This is seeing an evolution in the way contracts are managed, with many seeking out several ‘best-of-breed’ suppliers on shorter deals, replacing the end-to-end outsourcing seen previously.

As a growing number of applications are outsourced, the pace of change is increasing in the financial services sector. According to Arvato’s Quarterly Index, financial services companies were among the most active outsourcers in the private sector in the first quarter of 2014, with contracts worth £92 million. Additionally, National Outsourcing Association research conducted in June and July 2014 found that two thirds of companies expect to use outsourcing more often during the next five years.

The financial services sector is no stranger to IT outsourcing. In fact, it is one

of the more mature markets: banks and other institutions have been signing large deals for some time. Big banks are on their fourth generation contracts, making them “pretty savvy” users, especially compared with other, more conservative markets such as media or retail, says Ed Thomas, senior analyst at Ovum.

As with most sectors, outsourcing began with large network and IT projects. Today, firms are using the tool across all business processes. A lot of the IT ‘drudge’ work, such as keeping back office systems running, can be outsourced, freeing up staff to focus on the more innovative customer-facing, front office systems, which need to incorporate new technology such as social media, says Katy Ring, analyst at 451 Research. Currently, firms are outsourcing back office and HR systems, as well as productivity applications such as Microsoft Office. “Going forward, there will be a larger requirement for SaaS offerings to be incorporated into contracts,” she adds.

Outsourcing allows firms to aggressively pursue growth opportunities while mitigating risk. This delivers greater agility, higher quality, and lower costs, allowing organisations to compete on a global basis, Glenn Bladon, head of practice management at IT services firm ECS says. However, many banks are at a crossroads in terms of deciding whether to upgrade their legacy technology or invest heavily in meeting the trading needs of their clients, observes Matteo Cassina, executive vice-president, head of business lines at Saxo Bank, which is a specialist vendor itself, and enables clients to trade derivatives on its platform.

End of the mega deal

End-to-end outsourcing (also known as the 'mega deal') failed to truly take off in the financial services market and is now a thing of the past. It had a chequered history with some success, but also notable failures, according to Bladon. "The mega deal didn't take off in the financial services market like it did in other sectors. Although some of the outsourcing deal values were large, it was down to size rather than scope, with firms wanting to retain more control over their systems, infrastructure and data than in other sectors."

This has led to the growth of 'multi-sourcing' or 'smart sourcing' where best-of-breed suppliers are selected for application support, datacentres, networks and end user services. In the past, relationships were often too rigid, comprised of SLAs driven by metrics. Now, a more flexible approach is seeing firms thinking beyond SLAs, says Thomas, with the size of contracts reducing due to multi-sourcing and cloud. "What you find with companies that have signed a lot of contracts is, they have little regional deals in place. Some large institutions have these numbering in the hundreds."

Bladon agrees: "We are seeing smaller, shorter contracts with lengths now typically three or five years rather than seven to 10 years."

Optimal outsourcing

Within the financial services sector, there are two types of organisation, with very different challenges, according to Dave Paulding, regional director UK and Middle East, Interactive Intelligence. The first type is a traditional, established company with lots of legacy equipment; the second is the startup. "These leapfrog as they don't have the legacy hardware and don't want their own IT department. They want to leverage cloud; they develop their own IP around aggregating insurance. But they don't have the skills to set up a dedicated IT department"

On the other hand, traditional firms have a mindset where they are very cautious, says Paulding. "Some have been burnt by experiences they have had in the past. Also, there is a general concern from a compliance and security perspective. We are finding a lot of those are in-sourcing stuff that was previously outsourced, such as contact centres, for security reasons and trust concerns."

Therefore, outsourcing IT poses challenges for both supplier and client and the relationship between the two is integral. "For outsourcing to work well, relationships are key and are often not given enough credit for their importance and complexity to get right," says Kerry Hallard, CEO, National Outsourcing Association. "Retained knowledge is an issue too. Clients are so concerned about giving away too much knowledge throughout the outsourcing, that by the end of the contract, they are unable to operate without that supplier."

Optimal outsourcing can mean changing the company's entire approach to contracts. However, there are a number of options

for financial services firms looking to use the tool: it is an extremely competitive market. Thomas asks: can the big vendors that are stuck in a model of SLAs and fixed prices provide flexibility? "Smaller vendors with a focus on analytics and new cloud technology might be able to give you what you want," he comments.

He advises firms to look at global agreements spanning four or five vendors, rather than applying "a piecemeal approach". Additionally, pick a vendor to provide infrastructure or at least manage this and contract it out on a regional basis. "You are more in control; having fewer vendors is a way to keep a closer eye on costs."

Bladon advises firms to implement a clear strategy, adhering to and overseeing a target ecosystem of preferred vendors. This entails clear governance at all levels with suppliers working together to overcome service issues and deliver projects end-to-end. It also provides clear accountability.

However, preferred methods do depend on the individual, and relationships are often still not perfect. Thomas concedes: "Some companies prefer having one throat to choke and others like to deal with the best-of-breed suppliers; it does depend on what you are comfortable with. Some people bring in a services integrator who brings things together and manages the outsourcers: 'service integration management' is one of the buzzwords."

Outsourcing is certainly diversifying, giving financial services the opportunity to tap into skills that weren't available before. But there is still a need for vendors to understand the industry and the challenges and problems they face. "Banks need to impress upon vendors the importance of services they are providing," says Thomas. "Examples of outages are front page news. In an industry that's 24/7 and done both online and on mobiles, the technology has to be working constantly."



A New Data Centre at MMU



Manchester Metropolitan University has introduced a new high density data centre as part of a dual strategy to improve the reliability of IT services and reduce their environmental impact

Situated close to the city centre, Manchester Metropolitan University has a history dating back 150 years. It was awarded university status in 1992 and today is the largest campus-based undergraduate university in the UK with a total student population of more than 37,000.

Sustainability is an important aspect of the University's operations. In 2007–8 MMU's carbon footprint from gas, electricity and business travel was 24,797 tonnes, which cost £4.6 million. By implementing a series of dramatic changes, the University is on target to reduce its carbon footprint to 15,600 tonnes,

saving £3.8 million annually.

The University has recently completed the second phase of its new All Saints primary data centre. As a large consumer of energy, a strategy was developed to reduce the operating cost of providing IT services which ranged from implementing power management software for staff PCs to consolidating communications rooms, server rooms and data centre facilities.

"As the greenest university in UK league tables, it's important that everybody contributes to the sustainability agenda at MMU, and the data centre is an obvious opportunity" says James Woodward, IT Client Services Manager at Manchester Metropolitan University. "Our consolidation strategy was aimed

to improve the efficiency and availability of the data centre, as well as increase capacity utilisation over the lifecycle of the new facility."

Jeff Hall, IT Service Operations Officer at MMU said, "All IT services pass through the primary data centre. At the end of a two-year programme, our ultimate goal is to use two high density data centres to provide a fully managed, active: solution which can facilitate growth as well as allow the introduction of new services, as they are required."

Other Challenges and Issues

The customers of the data centre are the numerous departments and faculties, from HR and Finance to Science and Engineering. Services are required on a 24/7 basis so any breaks in continuity may negatively impact the student experience and as a consequence, the University's reputation. "All voice and data services pass through the primary data centre, so everything is lost in the event of an outage," said Jeff Hall.

Prior to commencing the consolidation strategy, IT services were provisioned through myriad server rooms and small data centres spread around the campus. "Ensuring adequate power and cooling for the IT equipment had proven to be a challenge," continued Hall, "especially as there were issues with 'dirty' mains."

Building a business case

Investment for the new data centre was provided by Salix Finance Ltd,

a not-for-profit company funded by the Department of Energy and Climate Change and the Welsh and Scottish Governments which provides 100% interest-free capital to the public sector to improve their energy efficiency and reduce their carbon emissions.

In order to access the development funding, James Woodward and his team first had to audit the energy consumption of the ad-hoc server rooms, including lighting, cooling and powering the equipment. Actual energy use was compared with that forecast after consolidation to make a strong case for the project, achieving a return on investment well within the 5-year period specified in Salix's terms.

In addition, it was also decided to locate the new data centre within an existing space on the campus. This not only saved the cost of a new building, but also reduced the emissions associated with demolition and removal of old buildings. The room chosen had previously served to house the campus PABX and was of sufficient size to accommodate the new infrastructure once the old equipment was decommissioned and the BT frames removed.

Selecting Schneider Electric and APT

"We'd had experience of Schneider Electric and Elite Partners, APT when we replaced a UPS in our old data centre. Before making a decision regarding the new primary data centre, we did our own research, downloaded white papers and read case studies. We visited other installations and discussed the experience of other users. We also invited other solutions and ran a full tender before finalising on APC

InfraStruxure with Hot Aisle Containment System (HACS), together with StruxureWare for Data Centers Software," said James Woodward.

"Recommendations played a part in our selection process," said Jeff Hall. "But we also liked Schneider Electric's modular architecture. It meant that we could deploy the new data centre using a phased approach; conserving capital and allowing us to keep the infrastructure proportional to the IT requirement. Modularity also gave us options to maximise the space we had selected for the new facility, so that we could deploy a high density environment within our old PABX housing. We effectively built a room within a room."

That room, built by APT, provides one hour minimum fire and water resistance and includes a raised floor for services. The new 120kW N+1 primary data centre was installed in two phases of nine racks followed by a further sixteen. The HACS enclosure not only increases the efficiency and effectiveness of the cooling solution, but also enables higher density IT to be accommodated than using a traditional perimeter room cooling approach.

The new room's Symmetra PX UPS has been sized to allow a minimum 15 minutes autonomy for the full designed load in the event of an outage. This provides more than adequate ride through capability to overcome non-blackout power transients, as well as sufficient runtime to allow on-site secondary power generation to come up to speed. The room is also protected by CCTV monitoring and swipe card access



that can be extended to individual racks.

"In operations, the use of StruxureWare for Data Centers software enables us to plan the way racks are utilised, and ensure that we have capacity for new service deployments," said James Woodward. "We can also monitor energy consumption which is helping to ensure the ongoing efficiency and resilience of the data centre".

In Conclusion

James Woodward said, "Our new primary data centre has had a significant impact on MMU's carbon footprint, reducing our overall emissions by 4% and taking a big stride towards our target of a 25% reduction. We're also seeing annual savings in energy costs exceeding 30% at the same time as gaining better control over our data centre capacity utilisation."

Jeff Hall added, "We set out to consolidate our data centres and increase the efficiency of our operations. We're well on target to achieve the reduction in energy use and emissions that were forecast as we set out on this strategy. We're seeing fewer outages as we ensure safe, secure and reliable IT services. The Schneider Electric data centre which APT designed and installed at the University has been crucial to this success."



Managing The Life Cycle For More Efficient Data Centres

Just as good genes cannot guarantee good health, a good design alone cannot guarantee a well built data centre that will remain efficient and available throughout its life cycle. In fact, from day one of operations, a data centre can start to deviate from its design performance specifications, eventually limiting either the total capacity that can be achieved or the useful operating life of the facility.

In addition, rapidly evolving IT trends and rising energy costs, have the ability to transform seemingly well-designed and well-run data centres into inefficient or inflexible assets. As a forward thinking approach, more enterprises are deploying Data Centre Life Cycle Services to obtain more from their assets.

While many factors have roles in the Life Cycle approach, it is essential to remember two key principles: designing the data centre for future change, and making sure there is an effective audit and upgrade strategy in place.

Provisions for future change
Designing with change in mind is therefore important if a data centre is to maximise its potential over long life cycles. Things to consider first should be the level of redundancy in the power infrastructure that will ensure minimisation of downtime during upgrades.

Another key consideration is a

modular approach to power and cooling infrastructure. Row-based cooling or hybrid cooling, for example, tends to be more easily scalable to changing load profiles. Getting the cooling closer to the IT equipment is also key to ensuring a more efficient and effective data centre, which can accommodate today's more power dense and heat intensive devices.

Data centre physical infrastructure (DCPI) in the form of prefabricated modules have key infrastructure prebuilt into a cube-like configuration, allowing for a 'Lego-block' approach. This offers the facility manager a predictable, tried, tested and quick-to-deploy approach that will enable any future plans to expand the existing capacity with minimal disruption.

A strategy to maintain the physical infrastructure once deployed will enhance the data centre life cycle, therefore life cycle costs would ideally be included in the budget. Financial models should typically be created for how a data centre might change in the future, and should include the use of effective data centre infrastructure management (DCIM) software tools to monitor and enhance the efficiency of the facility.

Optimising for continuous improvement

Once a data centre is in operation, a proactive philosophy of continuous improvement is

essential, and some form of measurement and analysis should be set in place. DCIM software provides the best set of tools, allowing for modeling the functioning of a data centre, testing would-be improvements, and proactively monitoring conditions.

Additionally, data centre audits could be carried out at regular intervals, or a major installation of new IT assets could act as an audit trigger. At any stage in the life cycle of your data centre, Schneider Electric Data Centre Life Cycle Services can offer support to maximise the lifespan of your data centre, whilst also maximising capacity over the long term.



White paper 195 "Fundamentals of Managing the Data Center Life Cycle for Owners" describes the five phases of the data centre life cycle, and offers practical advice to facility owners and management.

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Datacentres

[supplement]

Something in the way

FStech casts an eye over the datacentres area and finds that, when it comes to the financial services sector, there are various issues and challenges holding back progress



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STEP BY STEP

Whilst the Datacentre as a Service model has many enthusiastic supporters, it also continues to be dogged by confusion and various concerns, Liz Morrell finds

THINGS TO CONSIDER

Financial services organisations are well aware of the potential benefits of virtualised infrastructure, but barriers to wholesale datacentre virtualisation remain. Paul Golden reports

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GREEN LANTERNS

Datacentres are not the first things that spring to mind when you think green, right? Think again, says David Adams



Things to consider

Financial services organisations are well aware of the potential benefits of virtualised infrastructure, but barriers to wholesale datacentre virtualisation remain. Paul Golden reports

While IDC forecasts that banks will spend \$215 billion on technology this year, Karen Massey, senior analyst banking IDC Financial Insights says they will continue to be selective with IT initiatives, focusing on those that can deliver value to their clients and the organisation, while also satisfying the mandate of reducing costs and improving efficiency.

According to Kevin Leahy, Dimension Data global datacentre general manager, the natural evolution of applications based on modern programming tools and sunsetting of legacy applications means many financial sector clients now find themselves at a point where standardisation, automation and even cloud are readily achievable. "However, extending beyond server virtualisation to storage virtualisation we see laggards. Heavy governance has created a 'keep everything' mentality and many financial sector organisations do not even have an information policy that would allow an efficient tiered storage environment. Recently, storage spending has forced finance clients to revisit this approach and most are now actively defining an information structure and policy."

He says efficiency has never been easy to measure because organisational labour costs are not easily aligned with the incremental automation steps. "The capital savings are easy and apparent, but efficiency requires automation and process investments that sometimes appear as

budget increases until the efficiency savings can be achieved. Budget cycles that look for short-term efficiency returns frequently make the decision to delay; when budgets can look at a three-year or greater horizon the benefits are more easily demonstrated. For many clients, taking on projects that are critical but unable to be achieved with the current processes are often the key to get the investments started."

Financial services firms are increasingly adopting virtualisation for the cost savings and efficiency it offers, but they remain more likely to adopt a programme that keeps all of their data and applications on their own physical premises rather than sending data to off-site cloud providers according to Peter Godden, VP EMEA Zerto. "This will change as the financial sector becomes more comfortable with cloud services and security, although is only just starting to happen."

Without a stable network, financial institutions will not be able to effectively use virtualisation to reduce strain on the datacentre infrastructure, says Dave Greenfield, product marketing manager Silver Peak. "It can also often change a company's threat profile at a time when businesses are under increasing pressure to secure critical communications and data transfers. Not only will security policies need to be updated and evolved to accommodate these changes, but any WAN optimisation solution will need to address this so that data is



accelerated in transit securely between datacentres, remote offices and the cloud. With virtualisation so often associated with forward thinking and business innovation, it is imperative that an agile business ensures that they have the most reliable infrastructure in place to drive this, particularly banks, which have always been seen as early adopters of technology. Fail to do this and the virtual investment will either underperform or fail entirely.”

By optimising the WAN, financial institutions can remove over 90 per cent of the traffic across the network, providing the scalability needed to support all current and emerging applications, he continues. “This is essential for the migration of large volumes of data, as it not only ensures that the data is easily and rapidly available, but it also saves on hardware, shipping and deployment costs. Financial institutions will therefore have the power and flexibility to build their data centre networks to withstand unexpected traffic congestion, reduce the bandwidth-consuming effects of redundant data, overcome latency challenges for long-distance users and easily build in ‘bursting’ capabilities to address anticipated spikes in application usage.”

When asked about the factors organisations need to consider before adopting the virtual datacentre model, Exponential-e lead technologist Steven Harrison explains that where the historical on-premise network would have been an uncontended gigabit connection, running a VPN over a much slower and oversubscribed internet link will ruin the user experience. “If that link is internet-based it also becomes an attack surface where denial of service attacks can quite easily interrupt the business. As a result, the network infrastructure needs to be carefully considered in any infrastructure-as-a-service approach to datacentre virtualisation. Using a virtualisation model that relies on high quality networks delivered over a private internet that sits on the inside of the firewall will support the delivery of the end user experience as well as removing security concerns.”

He says the benefits do not directly relate to increasing efficiency, but rather to improvement in availability, peace of mind and compliance. “In addition, since the cloud is elastic and on-demand, the financial planning of IT will become a simple exercise since it will no longer need to be purchased in advance.”

Catching on

Financial services industry pickup is sizeable, having grown steadily for the better part of a decade, adds David Weiss, senior analyst Aite Group. “Most new enterprise development efforts are at least initially done and almost all new financial services start-ups are run on virtualised infrastructure. The biggest impediment is migration of legacy hardware and application on a server-by-server basis, which of course presents major obstacles to wholesale datacentre virtualisation.”

At the core, Weiss says increased efficiency and value-add can

be most easily measured by: Average CPU, memory, and bandwidth utilisation per physical server in the old physical versus new virtual model; Average infrastructure spend in new/migrated applications on virtual versus incumbent on physical on a per user/trade basis (whatever metric is typically used); Average time to build-out the infrastructure on those projects.

“Harder to measure but perhaps more important on a forward looking basis is the increased infrastructure efficiency of resource commoditisation and application development and management agility as a result of virtualisation. Once established, these metrics are useful not only in justifying virtualisation, but also in good cost/benefit analysis of moving to an off-premises datacentre (be it hosted or a private or public cloud) where clarity is of the essence.”

The reduction in hardware needed for a virtualised datacentre also reduces the need for power and cooling, which in turn improves an organisation’s corporate social responsibility credentials, says Brent Lees, senior product manager Riverbed Technology. “The ease of measuring the increased efficiency of virtualisation is greatly improved with management tools that can look at the whole of the IT infrastructure. A pre-and-post project comparison that analyses aspects such as the percentage utilisation of the server, application and file load times and performance, provides insight into the efficiency of a virtualised datacentre.”

It is only when all areas are considered and quantified, including powering, cooling, floor space, management costs and the reduction in servers that an organisation will be able to realise the full benefits of a virtualised datacentre, he concludes. “There are external agencies that can aid organisations with this process, but the starting point will be a performance management suite of tools that can report on both the physical and virtual infrastructure and interrogate the whole of an organisations IT infrastructure.”





Step by step

Whilst the Datacentre as a Service model has many enthusiastic supporters, it also continues to be dogged by confusion and various concerns, Liz Morrell finds

Acronyms – don't you just love them! In the IT world they play a bigger role than any other and with the emergence of a suite of 'XXX as a service' options in recent years, from software as a service to infrastructure as a service, it's little wonder the market gets confused. Get to DaaS and things just get worse. It used to generally be accepted as standing for Datacentre as a Service, but more recently is getting muddled up with another phenomenon – Data as a Service. It seems now we should be calling it DCaaS – Datacentre as a Service.

So given the confusion in the market, how are financial services companies expected to be confident enough to embrace the possibilities it offers? The model proves effective for the financial services sector since it offers a much more efficient option over the costs of running a datacentre in-house, taking advantage of the cost models introduced by large public clouds like Amazon and Google, which are based on pay-per-usage rather than upfront capital or contract expenditure. The model then allows financial services



organisations to procure IT services from anywhere in an on demand basis that can flex up and down and convert from capex to opex with no base subscription.

NaviSite is a Time Warner Cable company and provider of managed cloud and hosting service that has been providing managing services, including managed DaaS offerings, to its clients for 16 years and is working with a number of companies in the financial services sector (such as insurance company Cooper Gay Swett & Crawford). The company's managing director Sean McAvan notes that DaaS has a wide definition. "It can cover services ranging from dedicated colocation, where a managed service provider delivers computer racks or cabinets which are ready to power up with internet connectivity to house a client's existing IT equipment in a highly secure and resilient datacentre, through to pre-packaged configurations of hardware, networking, storage, connectivity and software in a datacentre, which would enable an external company to simply switch on services."

According to Danny Major, managing architect, strategic systems at Adapt, DaaS allows a greater level of expertise since the facility is now run by experts rather than as an add-on service. "When reading a financial organisation's mission statement, it is rare to find a reference to its IT components, datacentre or any other factors not related to its core business. This is because these elements simply enable the business to do what it does best. A datacentre provider, as an expert in the field, can step in and act on behalf of the organisation, with the technology and expertise to make systems work faster, more efficiently and more cost effectively," he says. In this example, financial services should look to leverage these experts and focus on what is core to their business model.

John Sidhu, partner at Glue Reply, believes companies should understand what best suits their needs when evaluating

the benefits of DaaS. “Factors such as availability of elastic infrastructure capacity, modern hardware, green facilities and service management expertise will be more or less important for different customers and hence should carry appropriate weight in the evaluation process. For banks and other financial institutions, though, the key must-haves are security and service



uptime/reliability, especially if considering core and customer-facing services,” he comments.

But the issue around security is one that comes high on the warning radar for many. McAvan observes that the nerves are understandable “Taking a step to outsource datacentre services can be a big leap of faith for an industry which relies on keeping data secure, private, compliant with industry regulations and which operates to strict data sovereignty rules.”

It can, however, be done through careful due diligence of suppliers. “Clients in the financial sector evaluating DaaS should ensure that the provider operates at tier 3 security levels, which would ensure fully redundant connectivity and ensure that there was no one single point of failure,” says McAvan. “This would also ensure added resiliency to cover business continuity during power outages and high availability.” They should also ensure that data is being hosted in the UK and the relevant certifications required are in place.

Innovate and transform

For the innovative and for startups in particular DaaS is the perfect model, according to Andre Cichowlas, financial services chief technology officer at Capgemini. “Datacentres can be used for launching new businesses rapidly because you are not building something, provisioning can be done in a matter of minutes, and you just pay for what you use.”

It also suits those going through business transformation projects such as Sainsbury’s Bank who will be using FIS to supply and host all its core banking systems, migrating from legacy Lloyds Banking Group platforms and infrastructure.

Major says more companies need to learn from the innovators. “These organisations are leading the charge and looking at ways in which to gain efficiencies by outsourcing services less closely related to their core business model.”

Cichowlas argues that greater take-up relies on a change in the sector’s mindset. “The technologies are there to support compliance or security issues. Financial services managers need to start thinking about agility and cost optimisation instead of protecting only what they own and their budget.”

For Major, the service providers themselves need to generate better confidence in their services and that financial companies should invest in the time and effort to find the right supplier. “Thorough due diligence is required when dealing with external vendors in order to validate their capabilities, ranging from site security to data location in order to address EU data privacy laws.”

He suggests a step by step approach to migration. “Considering the criticality of the financial services industry, it’s unlikely that such a migration to an as-a-service offering will be instant. Instead organisations should look to identify key small wins where workloads can be slowly transitioned out. This also grants the opportunity for de-risking any future moves and allows the benefits to be properly quantified prior to making any significant investment.”

In the meantime, for DaaS in particular perhaps a new acronym will help speed up adoption and reduce confusion.

“For banks and other FIs, the key must-haves are security and service uptime/reliability, especially if considering core and customer-facing services”



Green lanterns

Datacentres are not the first things that spring to mind when you think green, right? Think again, says David Adams

Is 'green datacentre' an oxymoron? Is it possible for a large building full of computers to be genuinely environmentally sustainable? Surely the very idea is as ridiculous a concept as 'honest estate agent', 'slimming beer', or 'Brazilian football fan who really enjoyed that semi-final'?

"If you go back five years, people thought about building green datacentres to reduce costs, release capacity by making better use of IT and building assets; and to present a green image for the organisation," says Chris Scott, datacentre services business development leader, Europe, at IBM. "Since the financial crisis, instead of cost, capacity and being green, it's become cost, cost, cost."

As financial companies use datacentres so extensively, potential savings gained by reducing the energy requirements for servers and cooling equipment can be enormous. The amount of power it will consume is the single biggest factor determining the cost of a new facility, says Rhonda Ascierio, senior analyst for datacentre technologies and eco-efficient technologies at 451 Research in New York. If a company can build a 4megawatt (MW) datacentre rather than a 5MW facility it will save between \$15 million and \$25 million, she says. At smaller datacentres, a 20 per cent saving on operational energy



costs at a 3MW facility could equate to \$500,000 per year; for a 1.5MW datacentre the annual savings could be \$260,000.

While Corporate Social Responsibility (CSR) programmes influence technology and energy use in datacentres only in very superficial ways, regulatory issues may be a factor. The Carbon Reduction Commitment (CRC), which requires the biggest energy consumers to report energy efficiency in detail and pay for additional carbon emissions, may well be extended to cover more enterprises in future.

The financial crisis had a significant impact on many financial companies' strategies. "Green issues fell off the agenda and were replaced by some pretty drastic cost-cutting measures," says Ovum analyst Gary Barnett, author of a book on the business case for green IT. "There was a two year period when lots of really solid business cases with short paybacks were cancelled or rejected. And it's now much harder to get investment approval for something that has a five year payback than for a 12 month payback."

Nonetheless, investments in energy efficient technologies are being made. On the technology side the most prevalent trend continues to be increased use of server consolidation and virtualisation. Some conventional servers may only attain 20 per cent utilisation much of the time and no more than 40 per cent at best, but consolidation and virtualisation can enable 80 per cent utilisation. Scott outlines an example from IBM's own

datacentre environment: “We consolidated over 3,000 Intel servers running Unix onto 11 z series servers, consuming 55 per cent less energy,” he says. “And it’s saved 85 per cent of the floor space in that datacentre, so allowed further expansion there for years to come.”

Adiabatic cooling, using air inside and outside the building, can enable far more effective regulation of temperature, minimising the need for mechanical cooling; while mechanical air and water-based cooling systems have also become more efficient. And many processors are now able to cope with much warmer temperatures than was once the case, thus reducing the need for cooling. More datacentres also now use hot and cold air containment, with cabinet and panel layout preventing warm and cold air mixing.

Ascierto cites examples of what can be achieved. Implementing ambient air based cooling systems at a 48,000 square foot, 4.8MW datacentre in Canada allowed TD Bank to operate without manual cooling for 70 per cent of the time and achieve an annual PUE of 1.4. TD Bank estimates that this and other energy saving measures helped save \$1.75 million in 2013. Ascierto also cites a smaller set up run by Deutsche Bank in New Jersey that has reduced PUE to 1.24 through use of air cooling, saving \$1.3 million per year.

Forward thinking

One of the most impressive datacentre facilities unveiled in recent years is Citigroup’s Frankfurt facility, built in 2008, with an energy efficient design and features that reduced energy costs by 72 per cent. But such spectacular initiatives are in the past for the bank, for the time being at least, says John Killey, global head of building operations at Citi. “We now have a very stable datacentre strategy, based on making sure we’re operating what we have as effectively as possible,” he explains. “We make sure we’re running datacentres at the right temperatures and humidity levels for the kit and to optimise energy performance.”

He says the bank has gone from using “datacentres where you could hang sides of beef” to some where cooling requirements are far less energy intensive. It is also incorporating other energy efficient technologies in its facilities, with a major Combined Heat and Power (CHP) facility planned for one European facility.

A small but growing number of financial companies are also using Datacentre Infrastructure Management (DCIM) software to monitor environmental conditions as well as power consumption in the datacentre, says Ascierto. “You’re able to better understand which type of equipment is consuming the most power, so you can fine-tune efficiency.”

The other technology used by financial companies and claimed as ‘green’ is cloud technology. Most cloud service providers do run very efficient datacentres, but end user companies must manage the use of such services carefully, warns Zahl Limbawala, CEO at data specialist Romonet, or they

may face the same negative consequences seen where use of virtualisation runs out of control and is over-used, because it appears to the end user to be very cheap: “Use of cloud resource can be uncontrolled, or poorly utilised and it’s not in the cloud provider’s interests to flag it up,” he says.

If the end result is the same, does it matter if financial companies use greener technologies for financial reasons? “Given the compelling economic case I’m happy that environmental benefit is just a nice by-product,” says Ovum’s Barnett. “The line I take is, if you’re not running a highly efficient datacentre then you are incompetent. A lot of this stuff is now best practice.”

“The sustainability conversation is not really happening,” agrees Ascierto. “We say that it’s right to call this ‘eco efficiency’ where the ‘eco’ is in ‘economics’. It’s all about money. But many of these companies are very forward thinking in their use of datacentres and that’s still to their credit.”



The financial crisis had a significant impact on many financial companies’ DC strategies. “Green issues fell off the agenda and were replaced by some pretty drastic cost-cutting measures”

Virtues for the modern age

The lack of public trust in the UK banking sector could be addressed by a Bankers' Oath, a think-tank has argued

T

he Virtuous Banking report,

launched by ResPublica in July, stated that the recent "merry-go-round of scandal and recrimination" would only cease once bankers embraced professionalism and committed to clear ethical standards. ResPublica said that despite five years of industry reform and regulation, small businesses were struggling to secure finance, customers were "bereft of good advice" and confidence in the banks was at an all-time low. The report claimed policy makers' focus on reform should be switched from legislative measures to promoting virtues in banking institutions. A Bankers' Oath was one way of encouraging higher levels of personal responsibility, it maintained. The report also called for more diversity in the type of companies operating in the banking sector and a greater focus on customer satisfaction targets, rather than just profit or shareholder returns. It added that small businesses should be reclassified as 'consumers' to ensure that banks treated them fairly. Phillip Blond, director at ResPublica, explained: "As countless scandals demonstrate, virtue is distinctly absent from our banking institutions. Britain's bankers lack a sense of ethos and the institutions they work for lack a clearly defined social purpose. In order for us to have the banks we desperately need and the country deserves, bankers must recognise the good, do the good, and be good. The Bankers' Oath represents a remarkable opportunity to fulfil their proper moral and economic purpose, and finally place bankers on the road to absolution."

However, speaking at the report's launch at the Financial Times HQ in London, Sir Richard Lambert



said that it was still "debatable" whether such an oath should be introduced at this stage. Lambert, who last year carried out a review into banking standards, noted that the ResPublica report was "full of good ideas" but said that there should be a focus on training, qualifications and organisational ethos before pushing forward with an oath.

"I think that this should come at the end of the process rather than at the beginning," added Lambert, who is in the process of establishing the Banking Standards Review Council, set to be operational by the end of the year. He agreed with the report's central tenet, that there was a fundamental need for "virtuous banking" in the UK. "The argument here is that ethics in all sectors of the economy is about promoting decisions and behaviours that are guided by values that go beyond a company's legal requirements."

"What the ResPublica report is saying, it seems to me, is that it's not enough to ask the questions: 'Is it profitable and is it legal?' The third and critically important question is: 'Is it right?' And that's something that can only be shaped by individual institutions, and at every level of the organisation." Referencing the latest £218 million Libor rate-rigging fine for Lloyds, Lambert said: "Lloyds traders did not personally benefit from manipulating the repo rates used to calculate fees on the Bank of England's liquidity lifeline. But they appear to have lived and worked in a culture where such behaviour did not, at least to those actually involved, seem out of the ordinary in the name of profit maximisation."

Also taking the platform at the report's launch was Paul Chisnall, executive director at the British Bankers' Association. He advocated setting up an independent body to work with banks on ethics at the most senior leadership levels, noting: "Restoring trust and confidence is the banking industry's number one priority. But meaningful cultural change in an industry as complex and diverse as banking takes time."

The report, *Virtuous Banking: Placing ethos and purpose at the heart of finance*, was authored by David Llewellyn, professor of money and banking at Loughborough University, Roger Steare, professor of organisational ethics at Cass Business School, and Jessica Trelvellick, senior researcher at ResPublica.

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Title: Breaking Banks: The Innovators, Rogues and Strategists Rebooting Banking. Author: Brett King. Publisher: Wiley. RRP: £23.99

If you can get past the 'look, ma, I'm riffing on pop culture!' title, then you'll find that the latest offering from BANK 2.0 author Brett King offers up a (mostly) worthwhile collection of interviews taken from across the global FinTech sector, all of which aim to reinforce his assertion that, "in the next 10 years, we'll see more disruption and changes to the banking and financial industry than we've seen in the preceding 100 years."

King has form here. He is, after all, the founder and CEO of retail mobile banking outfit, Moven, so when he declares that the FS sector is being reborn and re-invented, you'd be forgiven for thinking, he would say that, wouldn't he? Nonetheless, his passion for his subject matter sucks you in. He begins by noting that banking is not known for huge leaps in innovation or significant shifts in the dynamics of the players involved and quotes Paul Volcker's claim that the last great innovation was the ATM machine. "Volcker has a point. In all, banking hasn't really changed materially in hundreds of years. Ostensibly, the 19th century form of the bank branch is still largely recognisable today," Hart writes. However, he goes on to say that technologies like the internet, social media and mobile phones are proving to be gamechangers. "It is entirely possible that banks, with their heavy regulatory burden, high capital adequacy requirements, massive legacy infrastructure, and long-held conventions, may just have trouble adapting to these tectonic shifts."

It's also entirely possible that won't happen, but anyway...What follows is a series

of interviews with "the most disruptive players in the FS space" and an examination of their business models, concepts and approaches and constructs from a strategy, technology and success point of view. So, Giles Andrews, CEO, Zopa, says that his company is extremely efficient. "We're an online direct business without overhead and big branches and all that kind of stuff." Whilst Alex Twigg, CEO, UBank, believes that, "you really don't own your brand anymore; your brand is owned by your customers." You get the gist. Some of the Q&As hit the mark, others leave you wanting more.

For me, the book is at its best when discussing social media. There are insightful interviews with the likes of Frank Eliason, director of global social media at Citi, one of the first US majors active on Twitter for customer support and one of the first to have a formal social media team in place and a social media policy and strategy that were being rolled out to the organisation globally. "The banking industry has always been about relationships. Social media is about relationships. The two go hand-in-hand," he states. Ultimately, though, the big question here is: we are seeing massive economic and cultural transformation driven by digital, but will this impact upon banking the way it has upon retail (note the rise and rise of Amazon) or will the status quo remain in place? Many of the traditional banks will adapt to changing times; witness BBVA buying US digital bank, Simple. And is there even a strong enough demand for change from customers who are often just as conservative as the FIs that serve them? In many ways, *Breaking Banks* feels like a work in process. Hart himself admits that, "it is true that there is no Amazon or Facebook of banking right now that has taken the banking world by storm and is taking hundreds of thousands of people out of the traditional banking system. But there is activity that speaks to the disruption angle, the creation of a new category of bank." Whether or not you agree with that, you'll find this book an enjoyable read. Still not a fan of the title, though.

TOP OF THE TWEETS



The most tweeted FStech Online (www.fstech.co.uk) stories during July/August...

Visa buys into DocuSign

Visa has made a "strategic investment" in electronic document management company DocuSign.

TSB roll-out lets customers tap and go

TSB has rolled out 2.2 million new contactless debit cards following its announcement in January that it would issue them to all eligible customers; it has seen contactless spend increase in June to nearly six times the amount spent in January and taps by TSB customers have increased fourfold.

Digital banking grows

Mobile and internet banking is now being used for transactions worth almost £1 billion a day, according to a new report from the British Bankers' Association (BBA) and EY.

RBS announces £1bn tech investment

RBS/NatWest are to invest more than £1 billion into personal and small business banking, with a focus on improving digital services.

Amazon Fire 'could revolutionise mobile banking'

The launch of Amazon's first smartphone, called Fire, could drive the take-up of mobile banking in the UK, a new study claims.

Banks not embracing tech fast enough

While technology is changing every aspect of banking operations, some regulators believe banks are too focused on short-term success and are thus moving too slowly.



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